For Research Use Only

SMC6 Recombinant antibody

Catalog Number:83187-3-RR



Basic Information

Catalog Number: GenBank Accession Number:

83187-3-RR BC039828 GeneID (NCBI): Size: 100ul, Concentration: 1000 ug/ml by 79677

Nanodrop: **UNIPROT ID:** Q96SB8 Rabbit Full Name:

Isotype: structural maintenance of

chromosomes 6 IgG Immunogen Catalog Number: Calculated MW: AG6898 126 kDa

Observed MW: 130 kDa

Applications

Tested Applications:

WB, IF-P, FC (Intra), ELISA

Species Specificity:

human, mouse

Purification Method:

Protein A purification

CloneNo.: 240015F4

Recommended Dilutions:

WB 1:5000-1:50000 IF-P 1:50-1:500

Positive Controls:

WB: HeLa cells, human testis tissue, NIH/3T3 cells,

HEK-293 cells

IF-P: mouse testis tissue,

Background Information

SMC6 (Structural maintenance of chromosomes protein 6) is core component of the SMC5-SMC6 complex that is involved in DNA double-strand breaks by homologous recombination. The complex may promote sister chromatid homologous recombination by recruiting the SMC1-SMC3 cohesin complex to double-strand breaks. The complex is $required for telomere\ maintenance\ via\ recombination\ in\ ALT\ (alternative\ lengthening\ of\ telomeres)\ cell\ lines\ and$ mediates sumoylation of shelterin complex (telosome) components which is proposed to lead to shelterin complex disassembly in ALT-associated PML bodies (APBs) (PMID: 26983541).

Storage

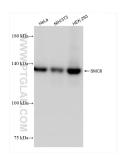
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

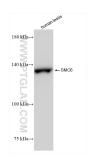
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

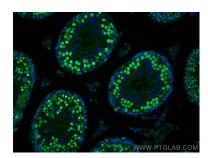
Selected Validation Data



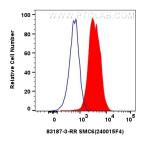
Various lysates were subjected to SDS PAGE followed by western blot with 83187-3-RR (SMC6 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



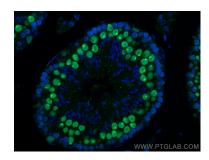
human testis tissue were subjected to SDS PAGE followed by western blot with 83187-3-RR (SMC6 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



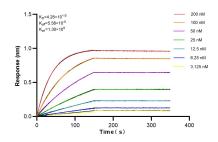
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse testis tissue using SMC6 antibody (83187-3-RR, Clone: 240015F4) at dilution of 1:200 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 A431 cells were intracellularly stained with 0.25 ug SMC6 Recombinant antibody (83187-3-RR, Clone:240015F4) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse testis tissue using SMC6 antibody (83187-3-RR, Clone: 240015F4) at dilution of 1:200 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 83187-3-RR against Human SMC6 were performed. The affinity constant is 0.428 nM.